

PROGRAM IMPLEMENTATION

Implementing a Family and Consumer Sciences Program

This section will explore how to put a program implementation plan into action. Throughout the previous sections, criteria, benchmarks, and examples of evidence have been identified to guide program development.

Included in this section are foldout pages of course competency lists aligned to state and national standards. These competency lists provide a foundation to assist in developing local course competency lists and performance objectives. Use the appropriate standards to help determine the minimum knowledge and skills all students need and at what level of success. Each list also includes a course rationale that can be adapted as needed to meet local needs.

Resources in this section will specifically assist in the design of instruction and assessment for each course. A variety of instructional delivery methods are described to incorporate as appropriate. Instruction will be guided by the competencies and objectives identified for students to master.

The key for demonstrating accountability for student learning is assessment. Assessments, or competency measures, must provide valid, reliable evidence of student mastery and address each performance objective for the course. The assessments may be written tests, performances, or products. These assessments are then organized and competency attainment is documented through a record-keeping system.

Integrating Standards into the Curriculum

The following guidelines describe the critical-thinking approach used for curriculum guide development for family and consumer sciences education from the Instructional Materials Laboratory.

1. Each unit of instruction opens with a **Practical Problem** stated using the question stem, “How do I...”
2. The **Competency** is taken directly from the established competency list and appropriate references are given in parentheses.
3. **Enabling Objectives for Mastery** are steps or learning objectives to assist students in building competence. The enabling objectives can be thought of as the parts that when added together will equal the competency. Each begins with a verb and is a statement that relates to developing the competency.
4. The **Teacher Background** information section provides the rationale for why this competency is needed and offers background research or other data a teacher may find useful when preparing this unit of instruction. The References section lists the sources used or consulted to develop the unit. Many of these resources are available for free loan from Career & Technical Education Resources

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(CATER, formerly MRCCTE), University of Missouri-Columbia, 2 London Hall, Columbia, MO 65211 (FAX 573/884-4112, 800/392-7217), <<http://www.cater.missouri.edu>>.

5. The **Learning Activities** section repeats the enabling objectives and provides a learning activity that will assist the student in demonstrating mastery of the competency. The Learning Activities section allows students to explore an issue with the teacher who is guiding the discovery. Discussion topics supplement the learning activities and are used whenever needed to help the teacher guide the students through the activity and reflect on their learning. These discussion topics are essential to the critical-thinking approach. The discussion topics focus the students' attention on the issue or concept as it relates to the real world. They often provide an opportunity for putting theory into practice.
6. The **Assessment** section is divided into three categories: (a) paper and pencil work such as quizzes, activity sheets, journal writing, and research reports; (b) classroom activities such as presentations, panel discussions, FCCLA classroom projects, and skits; and (c) real-life experiences such as internships, volunteer projects, and FCCLA service projects.
7. Supplemental materials may include **Fact Sheets**, **Instructor Information**, **Activity Sheets**, **SEARCH for Solutions** worksheets, **Thinking It Over** reflection worksheets, etc. These materials can be used as appropriate. They could be used as handouts, assessments, in-class worksheets, reference materials, or in other ways.

Aligning Curriculum to Standards

The following pages of the *Implementation Handbook* provide cross-references to minimum student competencies identified for the family and consumer sciences courses. Each of these key performance indicators reflects important, but more general skills needed by all Missouri students as they prepare for life and work in the 21st century.

These charts represent the combined efforts of a number of family and consumer sciences educators from Missouri who contributed in a variety of ways throughout the development process. In the summer of 1996, 110 teachers from across the state participated in an in-service course that the University of Missouri-Columbia offered and focused on the development of curriculum frameworks and standards for family and consumer sciences. As a part of their work for this course, participants validated initial links identified between the Missouri family and consumer sciences semester course competencies, the Missouri Show-Me Standards, and the Ohio and Colorado core competencies. During the summer and fall of 1996, several Missouri family and consumer sciences educators participated in the Vocational 21st Century Curriculum project. This project cross-referenced the student competency lists for all Missouri family and consumer sciences courses with the Missouri Show-Me Standards and Missouri's Frameworks for Curriculum Development. In 1999, a task force met to align the newly published National Standards for Family and Consumer Sciences Education with the competencies identified for each of the required courses.

Instructions for Use of Crosswalk and Alignment

The following charts link minimum student competencies identified for required courses with the Missouri Show-Me Standards, SCANS competencies, All Aspects of the Industry objectives, the Core Employment Skills competencies, and core competencies identified for family and consumer sciences programs in Ohio. These sets of skills/competencies are provided as a part of this document.

The first column describes the duty band and specific competencies under that duty band. The second and third columns indicate the Missouri Show-Me Standards related to each Missouri course competency. The fourth column indicates the National Standards for Family and Consumer Sciences Education related to the Missouri course competency. Additional columns on the actual charts provide alignment to other standards as defined on the chart.

An example of the first four columns is illustrated below:

MISSOURI COMPETENCY	Show-Me Goals	Show-Me Content Standards	National Standards
Child Development, Care & Guidance			
<i>Course Rationale: To improve the quality of life for Missouri's children, performance competencies in the Child Development, Care and Guidance course taught in Family and Consumer Sciences Education programs enable students to a) construct meaning pertinent to child care, guidance and supervision; b) communicate effectively with family members, child care agencies and professional service providers; c) solve problems based upon the developmental needs of children; d) make decisions that support the sound physical, mental and social development of children; and e) assess the impact of the parenting role in society.</i>			
A. Assuming Leadership Roles as Responsible Family Members and Citizens			
1. Utilize FCCLA program(s) to address child development, care and guidance issues	1.1, 1.2, 1.4, 1.5, 1.7, 1.8, 1.9, 2.1, 2.2, 2.3, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.8, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	CA1, CA3, CA4, CA5, CA6; HP2, HP3, HP4, HP5, HP6; MA3; SC8; SS6	1.1.3, 1.2.4, 1.3.2
2. Utilize leadership qualities and skills for problem solving	1.1, 1.2, 1.3, 1.5, 1.8, 1.10, 2.1, 2.2, 2.3, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, 4.1, 4.3, 4.4, 4.5, 4.6	CA1, CA3, CA6; SC8; SS6	1.1.2, 1.1.5, 1.1.6, 1.2.6, 4.5.2, 4.5.3

Note: The crosswalk charts for the courses noted in this document represent clearly recognizable connections between the Missouri competencies and other performance indicators. Therefore, it is recommended that they be used as a general guide for identifying linkages at the local level. Local programs will want to consider different and/or additional linkages based on local school and community needs.

For more detail, obtain or contact the following resources:

- Work and Family Life OCAP (Ohio's Competency Analysis Profile). Columbus, OH: Vocational Instructional Materials Laboratory, The Ohio State University, 1992.*

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- Work and Family Life Program. 6 vols. Columbus, OH: Vocational Instructional Materials Laboratory, The Ohio State University, 1993-1995.*
Contact: Instructional Materials Laboratory, 2316 Industrial Drive, Columbia, MO 65202, 800/669-2465, FAX 573/882-1992 (catalog numbers 40-0900-I, 40-3000-I, 40-7000-I, 40-3200-I, 40-7200-I, 40-5100-I).
- Pre-Employment/Work-Maturity Skills Instructional Resource Guide (30-6000-I). University of Missouri-Columbia: Instructional Materials Laboratory, 1992. Contact:: IML (See previous entry.)
- All Aspects of the Industry (65-9000-I). University of Missouri- Columbia: Instructional Materials Laboratory, 1994. Contact: IML (See previous entry.)
- Learning a Living: A Blueprint for High Performance (A SCANS Report for America 2000). Washington, DC, U.S. Department of Labor, 1992.*

*These resources are available to Missouri educators for free loan from Career & Technical Education Resources (CATER, formerly MRCCTE), University of Missouri-Columbia, 2 London Hall, Columbia, MO 65211 (FAX 573/884-4112, 800/392-7217) <<http://www.cater.missouri.edu>>.

Instructional Delivery Strategies

“Classrooms die as intellectual centers when they become simple delivery systems for lifeless bodies of knowledge.” These are the words of classroom teacher, Sue Selbin (*Family and Consumer Sciences Curriculum: Toward a Critical Science Approach*, AAFCS 1999 Yearbook). She believes that when a passion for justice, critical knowledge, and social change are instilled in students, the outcome will be profound social consequences. This requires teachers being critical thinkers and developing classroom strategies for the implementation of a critical-science questioning approach. Teachers must learn how to ask students deeper questions and go beyond the yes and no or right and wrong questions.

Critical questions are difficult and may even be impossible to answer once and for all. Critical questions reappear for families and individuals at different times and in different circumstances. Critical questions should develop the students’ reasoning capacity and in turn their ability to analyze and challenge actions. Chaffee (1994) suggests there are five key components of critical thinking. These components are thinking actively, carefully exploring situations with questions, thinking for one’s self, viewing situations from different perspectives, and discussing ideas in an organized way. It is not the intent of this guide to teach critical thinking, but it is the goal to encourage teachers to incorporate critical thinking into their classrooms. Perfecting the art of asking critical questions will most likely require professional development over a period of time. The challenge is to help students develop the capacity to reason and take ethical action.

Many of the following instructional strategies may be familiar, but with some significant changes in the method of delivery, these strategies can be structured around the components of critical thinking. These components will change the environment into one that invites teacher and student growth.

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Class Discussions

Opening the floor for students to share ideas and opinions can get out of hand quickly. The following tips will help keep the discussion focused on relevant issues in the lesson.

- Limit discussion to 10-15 minutes.
- Students need to be emotionally involved through common experiences such as demonstrations, case studies, news clippings, videos, or reading assignments.
- Allow students to write their thoughts about the topic before beginning the discussion.
- Provide positive feedback to every student for participating.
- Allow each student time to organize his or her thoughts; don't move on too quickly.
- Use Socratic questioning such as "How did you come to that opinion?" "What are some of the errors in that approach?" "What do you predict will be the likely response to that choice?" "What would be the next step in making that happen?" "What outcome do you think would best solve this problem?"
- Keep the discussion on task.
- Give a warning before ending the discussion. Ask for final comments. Then summarize the main points that relate to the topic.

Cooperative Learning Groups

Challenging students to work together at times is a relevant, real-world experience. Establishing ground rules for behavior and expectations for group work will smooth out many of the rough edges.

- Three common problems are often related to presenting a weak activity for students to work on: (a) one group member is dominant, (b) the group gets sidetracked, and (c) reporting out can fall apart.
- Some ways to correct these problems are to ensure individual accountability; create win/win opportunities like jigsaw groups where each of the four members becomes an expert in one aspect then teaches each others; or assign roles such as discussion leader, time keeper, or recorder.
- Use peer evaluation, peer coaching, or peer feedback.
- Give total points to the group and allow the group members to divide the score.
- Group makes a list, individuals make a choice, and group makes a specific choice. (This is a technique to focus on consensus building.)
- Give group exams.

One-Minute Reflection/Thinking It Over

Use a worksheet such as Thinking It Over or Thinking at Right Angles to help students relate facts and opinions as they examine issues. Reflection, journal writing, learning logs, and similar strategies focus students' attention on their own cognitive skills. This leads to metacognition, or thinking about the quality and content of their thinking.

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- Ask students to write for 1 minute and paraphrase a concept or issue presented during the lecture.
- Challenge students to break down technical material or procedures for someone else.
- Use a journal or learning log for students to pose and react to thoughtful questions.

Student-Generated Test Questions

Teachers frequently report that students are more demanding or critical of themselves than others are of them. Students are challenged to find the answers as they struggle to write their own test questions. Like cooperative groups, this strategy is most effective when students have ground rules or stated guidelines for what a good test question should be.

Scoring Guides

Scoring guides, sometimes called rubrics, define expectations and parameters for projects or products when the evaluation of the student's work might be based on subjective scores that are hard for the instructor to describe and are more difficult for the student to learn from. The scoring guide describes various levels of achievement and the criteria that will be used for the evaluation.

Section 6 of this *Implementation Handbook* provides several examples of scoring guides. Many sources recommend that students help to define the criteria on the scoring guide so that everyone understands the terms used and expectations for quality work.

The instructor may need to develop the scoring guides at first until students become comfortable working with them. Then the students may be ready to provide good ideas about quality projects, products, or work. As students become more comfortable and proficient using scoring guides, they will be developing the skills to self-evaluate quality performance or products.

The scoring guides serve as an instructional strategy by defining what quality is expected and what will be considered acceptable minimum work. They also serve the assessment function of providing feedback on performance or work.

Throughout this *Implementation Handbook*, you will see one style of scoring guide. There are a variety available from printed sources and the Internet. One particularly useful reference is *Rubrics: A Handbook for Construction and Use* edited by Taggart, Phifer, Nixon and Wood. This book is available for free loan from Career & Technical Education Resources.

Other Strategies

A number of other strategies can add variety to classroom instruction and appeal to different learning styles of students. Review the course goals and performance objectives to identify creative instructional methods to engage students in learning. Some examples are listed below:

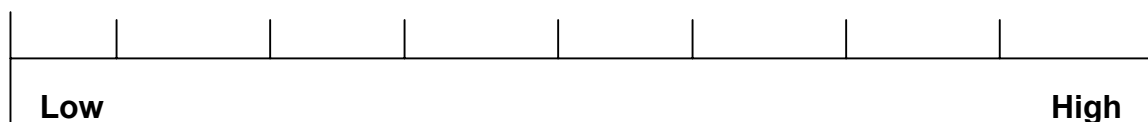
- √ Role-play
- √ Drill and practice
- √ Contract learning
- √ Case studies
- √ Demonstrations
- √ Guest presentations
- √ Field trips/job shadowing/mentoring
- √ Lecture
- √ Graphic organizers (student creations or instructor designs)

The following pages illustrate a few types of graphic organizers and the information each is most suited to describe. Students will demonstrate higher order thinking skills when they analyze types of information to present in a graphic organizer, synthesize data to design a visual model, or evaluate data when selecting the appropriate type of graphic organizer to convey their message.

An excellent resource for teaching critical thinking in a family and consumer sciences classroom is *Family and Consumer Sciences Curriculum: Toward a Critical Science Approach*, Glencoe/McGraw-Hill, 1999. Chapters include “Developing Questions in a Critical Science Classroom”: Sue Selbin p. 172; “Practicing Critical Thinking Through Role Play”: Frances M. Smith, pp. 184-194; and “Developing Curriculum Using Broad Concepts”: Loretta Hauxwell and Brenda L. Schmidt pp. 91-102.

Continuum

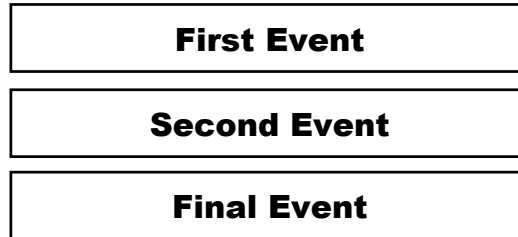
Continuum is used for time lines showing historical events, ages, amounts of something (e.g., weight), shades of meaning, or rating scales. It can show relationships or compare and contrast elements. Key questions: What is being scaled? What are the end points or extremes? What is the relationship between items on the continuum?



Chain of Events

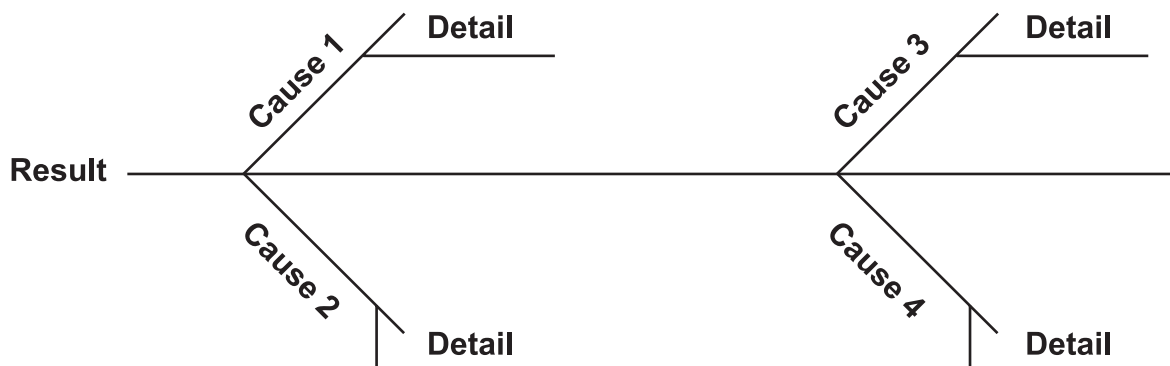
Chain of events illustrates the stages of an event, the actions of a character, or steps in a procedure. It focuses on sequencing skills. Key questions: What is the first step in the procedure or initiating event? What are the next stages or steps? How does one event lead to one another? What is the final outcome?

Beginning

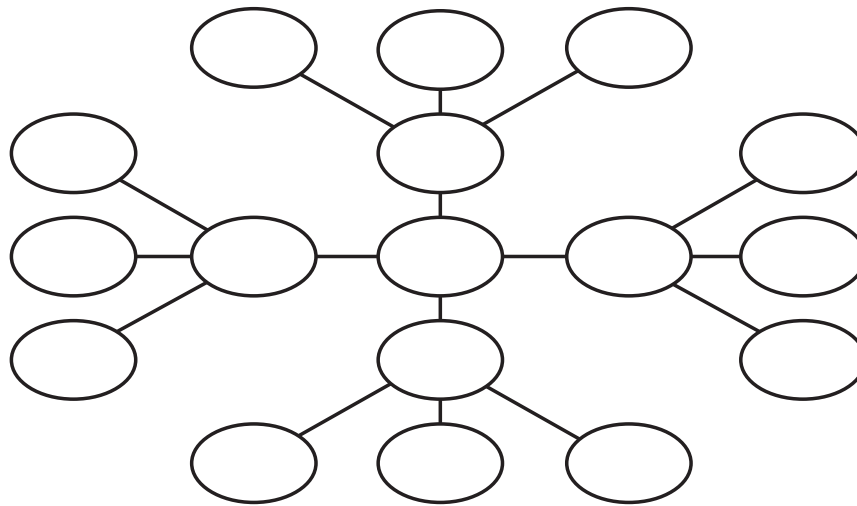


Fishbone Mapping

A fishbone map is used to show the relationships among the parts of a complex event (e.g., an election, a nuclear explosion) or complex phenomenon (e.g., child abuse, eating disorder, learning disability). Key questions: What are the factors that cause X? How do they interrelate? Are the factors that cause X the same as those that cause X to persist?



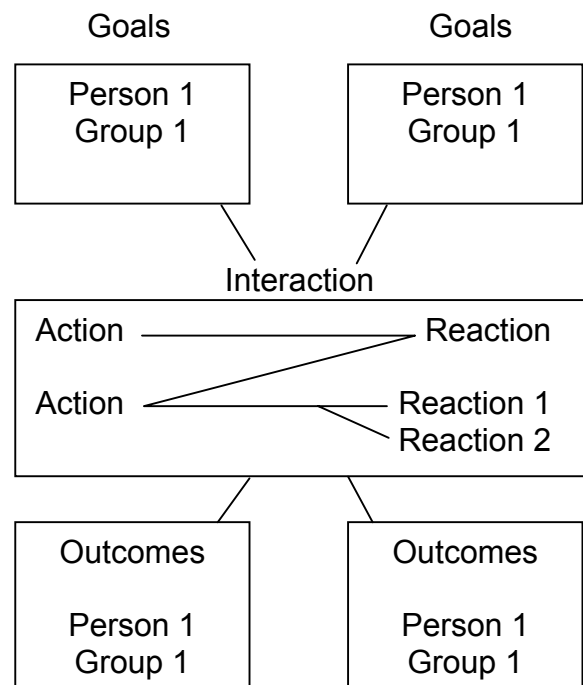
Clustering



Clustering is a nonlinear activity that generates ideas, images, and feelings around a stimulus word. As students cluster, their thoughts tumble out, enlarging their word bank for writing and often enabling them to see patterns in their ideas. Clustering may be a class activity or an individual activity. Brainstorming sessions can use clustering techniques to gather and record ideas. Key questions: What do you think of when I say....? What can we do about....?

Interaction Outline

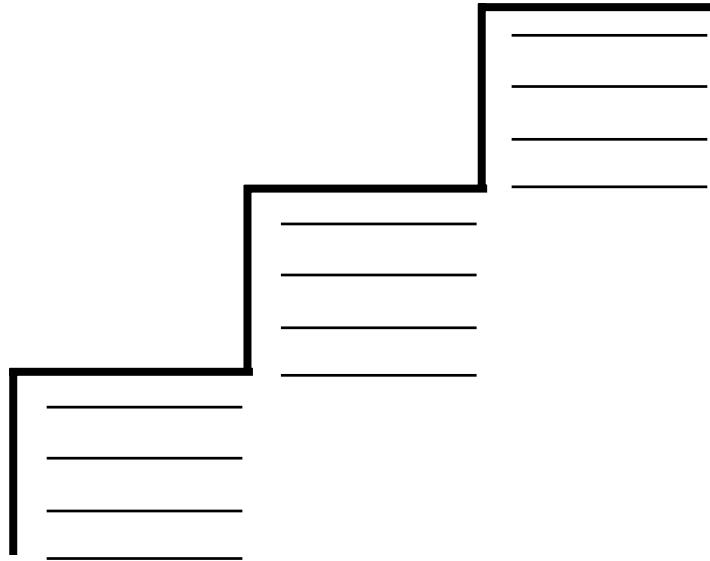
Interaction outline is used to show the nature of an interaction between persons or groups, such as the interaction between community members and local political leaders. Key questions: Who are the persons or groups? What were their goals? Did they conflict or cooperate? What was the outcome for each person or group?



Sequential Thinking

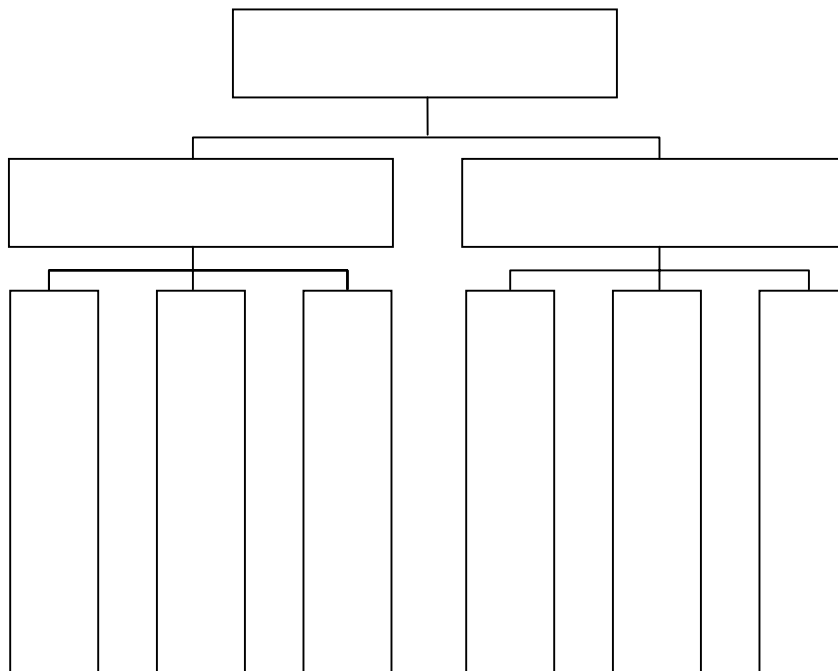
A stair-step sequential thinking chart identifies steps to completion and allows for elaboration or clarification. Key questions: What are the steps involved? In what order should the steps be taken?

1.



A hierarchical sequential thinking chart outlines the breakdown of information in a larger concept or procedure. It can be used to illustrate an organizational structure. Key questions: What is the main concept or outcome? What are the component parts? In what order, or on what level, does each piece occur?

2.



Storyboard

A storyboard is a graphic, sequential depiction of a script. Students recall major events of the story then illustrate the events in the squares provided. The storyboard can help organize a skit or video before performance. Key questions: What is the order of events? Who is involved and in what order?

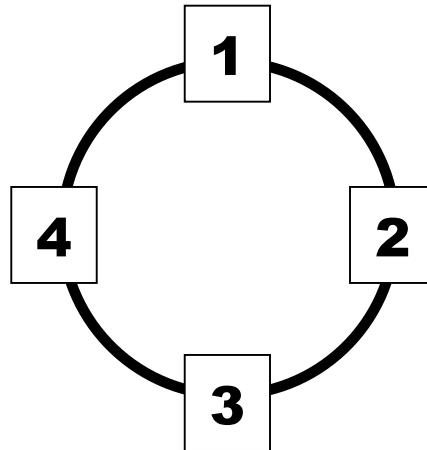
Compare/Contrast

Compare/contrast is used to show similarities and differences. Key questions: What is being compared? How are they similar? How are they different?

	Name 1	Name 2
Attribute 1		
Attribute 2		
Attribute 3		

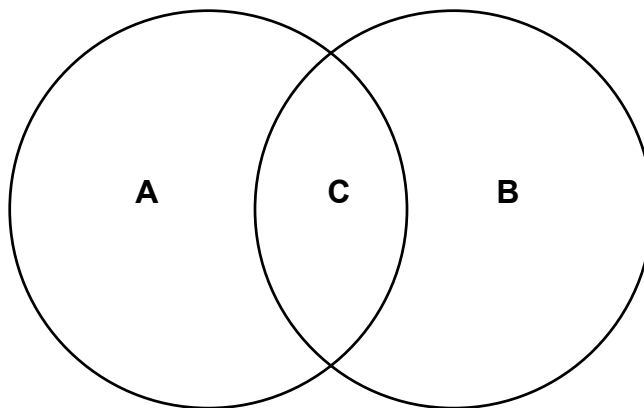
Cycle

A cycle attempts to show how events in a series interact to produce a set of results again and again, such as a life cycle or a cycle of poor decisions. Key questions: What are the main events in the cycle? How do they interact and return to the beginning again?

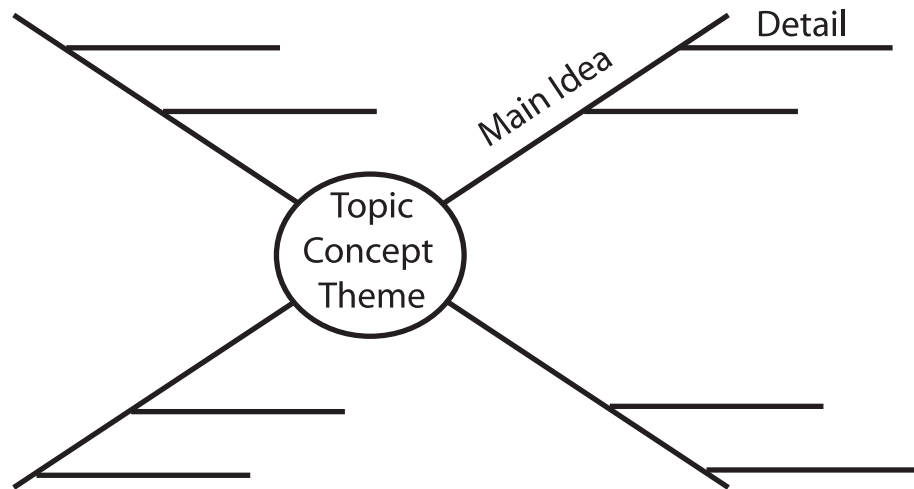


Venn Diagram

The Venn diagram is made up of two or more overlapping circles. It is often used in mathematics to show relationships among sets. In language arts instruction, Venn diagrams are useful for examining similarities and differences in characters, stories, poems, etc. It is frequently used as a prewriting activity to enable students to organize thoughts before writing a compare/contrast essay. Key questions: What is being compared? How are they similar? How are they different?



Spider Map



The spider map is used to describe a central idea, such as a thing, process, concept, or proposition. The map may be used to organize ideas or to brainstorm ideas for a writing project. It builds skill in analysis or synthesis as ideas are taken apart or combined in new ways. Key questions: What is the central idea? What are its attributes? What are its functions?

Assessment Methods

In addition to paper and pencil tests or traditional observations of student behavior, three alternative methods of measurement can be very effective in assessing student thinking: reasoning, action, and reflection. These tools are sometimes described as alternative assessments, or authentic assessments, and can be divided into three categories:

1. Products and projects
2. Performances
3. Metacognitions (or thinking about thinking)

Products and Projects

A project or product can be an assessment or task that students work on individually or in cooperative learning groups. To be an effective learning tool, the project should focus on a topic in the curriculum. The criteria being used to grade or evaluate the work should be determined before students begin the assignment. A project or product helps students in developing organizational skills, problem-solving and decision-making skills, technical skills, and interpersonal and communication skills.

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Project assessments may accomplish the following:

1. Allow the students to formulate their own questions and then try to find answers to them.
2. Provide students with opportunities to use their multiple intelligences to create a product.
3. Allow teachers to assign projects at different levels of difficulty to account for individual learning styles and ability levels.
4. Motivate students.
5. Provide an opportunity for positive interaction and collaboration among peers.
6. Provide an alternative for students who have problems reading and writing
7. Increase the self-esteem of students who would not get recognition on tests or traditional writing assignments.
8. Allow students to share their learning and accomplishments with other students, classes, parents, or community members.
9. Provide essential learning outcomes through application and transfer.

Performances

The instructor often must put more planning into a performance-based assessment to ensure that the outcome demonstrates learning. Students may read, research, and understand how to complete a procedure or skill, but they may not know how to transfer that knowledge into action.

One of the most important parts of creating a performance assessment is to imagine and define what the performance will look like. Identify the criteria for what constitutes a good performance and what is acceptable or unacceptable. Of course, this description must be determined *before* the assignment or assessment occurs.

Performance assessments encourage students to make decisions, collaborate, use oral and written communication skills, conduct research, resolve conflicts, persevere with a task, or be innovative such as to design new policies or procedures.

Metacognition

Metacognition is the process of thinking about thinking. It refers to one's knowledge concerning one's own cognitive processes or thinking. For example, metacognition occurs when students notice that they are having more difficulty learning one concept or fact than learning another concept or fact. Metacognition has to do with the active control of cognitive processes. Metacognitive processes are key components of planning, problem solving, evaluation, and many aspects of communication.

Paper and Pencil Tests

Written assessments can represent a broad category ranging from multiple-choice questions to open-ended responses to research reports. The focus of a written assessment is very narrow and the outcome is highly structured, making this a highly reliable method for assessment. Paper and pencil test questions can be written to assess higher order thinking skills. Although this method is not usually described as authentic, it can be used effectively to assess critical-thinking skills.

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This traditional assessment method should not be overlooked. However, questions must be structured to allow students to show their thinking not just to select an answer. It is incorrect to assume that because a student selected the right answer he or she used the correct thinking operation to obtain the answer. The student just might have gotten lucky!

A few examples of higher order thinking skills are shown in Appendix A. The graphic pyramid lists action verbs that describe critical-thinking processes as well as products or performances that demonstrate the use of critical-thinking operations. It may be helpful to refer to the illustration when designing paper and pencil assessments to include critical-thinking skills along with content knowledge.

Criteria for Evaluating Assessments

Whether using paper and pencil, products and projects, performances, or metacognition to measure student learning, the following criteria for evaluating the quality of assessments may be helpful.

VALIDITY: This refers to the assessment's ability to accurately measure learning.

RELIABILITY: To be reliable, an assessment must yield similar results from student to student, year to year, class to class, or evaluator to evaluator. The assessment must be consistent to be a reliable measure of learning.

DIRECT ASSESSMENT: The instrument is used to measure performance at the time the student is demonstrating the skill. It can be thought of as a real-time assessment.

INDIRECT ASSESSMENT: This type of assessment occurs after the performance. Inferences are made about the student's ability without the student actually demonstrating the skill or ability.

COST: This refers to the amount of money needed to develop or administer the assessment. This is especially relevant for assessments that involve more expensive materials or supplies and portfolios that may require special storage areas.

TIME: This refers to the amount of time required to develop or administer the assessment.

EVALUATOR(S): It may be appropriate to use peer assessments, self-assessments, teachers, parents, administrators, potential employers, or other authentic audiences as evaluators. Using more than one evaluator or type of evaluator lends reliability to the assessment.

Creating Critical-Thinking Assessments

Assessment Methods

No one can deny the importance and emphasis being placed on accountability and student assessment. Certainly, student performance is one of the measures used to determine how effective the curriculum and the teacher are in meeting district goals. As districts and teachers determine essential outcomes, decisions must also be made as to how those outcomes will be measured. At the classroom level, the curricular orientation of the teacher will also impact on the assessment choices. To be consistent, the method of assessment should directly reflect the method of curriculum implementation. A critical-science orientation calls for assessment techniques that will reflect the student's ability to take action based on critical thinking and practical reasoning.

Performance assessment and authentic assessment receive a lot of attention today. These terms are often used interchangeably, but in reality they are not the same. According to Meyer (1992), performance assessment refers to the kind of student response to be examined. Authentic assessment refers to the context in which that response is performed. "Students must be given a variety of tasks and situations in which they are given an opportunity to demonstrate their understanding and to thoughtfully apply knowledge, skills, and habits of mind in a variety of contexts." (Marzano, Pickering, and McTighe, 1993).

It is important in teaching for student understanding that teachers establish clear performance targets and that these fit together as a powerful means of linking curriculum, instruction, and assessment. For more information on developing assessment, refer to *Alternative Assessment: A Family and Consumer Sciences Teacher's Tool Kit*, available from the Instructional Materials Laboratory. Also refer to the chapter on assessment from *Using a Critical Science Approach*, in the Education Division of the Association for Family and Consumer Sciences, *Family and Consumer Sciences Teacher Education, Family and Consumer Sciences Curriculum: Toward a Critical Science Approach*, Glencoe/McGraw-Hill, 1999.

Worksheet for Designing Assessments Based on Critical Thinking

Purpose:

Critical-thinking skills allow students to combine content knowledge with habits of mind or behaviors that are necessary for success in work and family life.

Objectives for Implementing Critical Thinking:

The instructor will

- √ Assist students in identifying and clearly defining a task relevant to work or family life
- √ Include higher order thinking skills in learning activities and assessments
- √ Explain standards students are expected to master for successful performance
- √ Clearly define criteria used in assessment of learning and performance

Design the Assessment First:

Use the following questions to establish assessment criteria and learning outcomes. This will lay the foundation for your instruction. When you have determined what you want students to know and be able to do, you can tailor your instruction to meet those criteria.

1. What skills and knowledge do I want students to obtain from this unit/activity?

Performance skills: _____

Content knowledge: _____

For example: I want students to understand why it is important to analyze data from several sources before making decisions about health care products and services.

2. Which higher order thinking skills are used to demonstrate mastery of this knowledge? _____

For example: Compare sources, analyze data, and draw a conclusion.

3. Based on your expectations in steps 1 and 2 above, write a learning activity using critical thinking to demonstrate mastery of content knowledge and performance skills. _____

For example: Find examples of various advertising techniques related to health care products or services to examine the information provided for reliability and credibility.

4. Describe the types of resources students may use in this learning activity.

For example: Use magazines or newspaper advertisements.

5. How will students perform or demonstrate their learning? (What will be the physical outcome?) _____

For example: poster, skit, journal writing, FCCLA project, debate, and/or presentation

6. Rewrite your original learning activity in step 3 to include acceptable resources and expectations for a product/performance to demonstrate learning.

For example: Use magazines to find examples of advertising techniques related to health care products and services. Create a poster using ads that illustrate various ad techniques.

7. What habits of mind will this assessment measure? What student behaviors will show you these habits? (How will you know that they know?) _____

For example: cooperation, teamwork, persistence, problem solving, time management

8. On your own, or with input from students, design a scoring guide to identify the knowledge and skills you will use to assess learning and mastery. Refer to Section 6 for information on creating your scoring guide.
9. Itemize the competencies and standards you will assess with this learning activity:
Content competencies _____

Missouri Show-Me Standards _____

National FACS Education Standards _____

Higher order thinking skills _____
Process skills _____
10. Present the learning activity and the scoring guide to the students. Allow enough time for students to complete the activity. Assess the competencies and standards using the scoring guide. Now evaluate how this learning activity worked to teach students the content knowledge, build their skill levels, challenge their critical-thinking abilities, and reinforce habits of mind for lifelong learning.

Notes:

- Not all learning activities have to be critical thinking or performance based. Lecture, memorization, recognition, and application are relevant to many content areas.
- Not all learning activities have to be assessed for a grade. Some activities may be used for practice or reinforcement of skills.
- Learning objectives and scoring criteria should be given to the students up front so they are aware of instructor expectations and performance goals.

The questions and steps on this worksheet were adapted from procedures described in *Dimensions of Learning* by Robert J. Marzano, et al. (1992).

